

# *IEO ichthyoplankton data base*

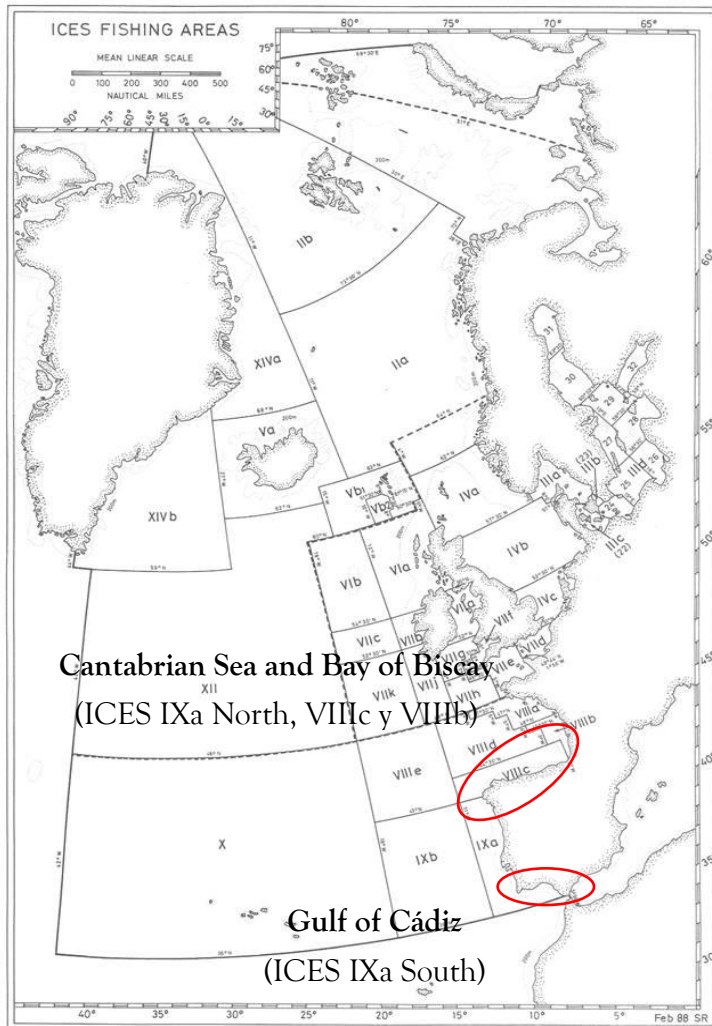


Spanish Institute of Oceanography (IEO)

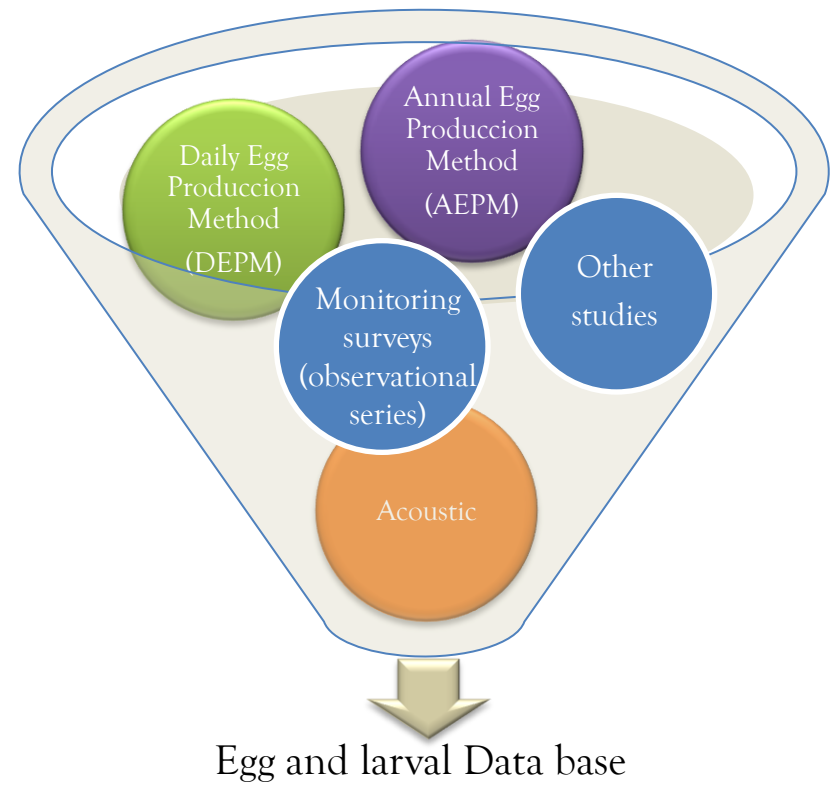
*ICES Workshop on the ICES Egg and Larval Database (WKIELD)*  
Copenhagen (Denmark), 27-29 April 2015



## ICES Areas



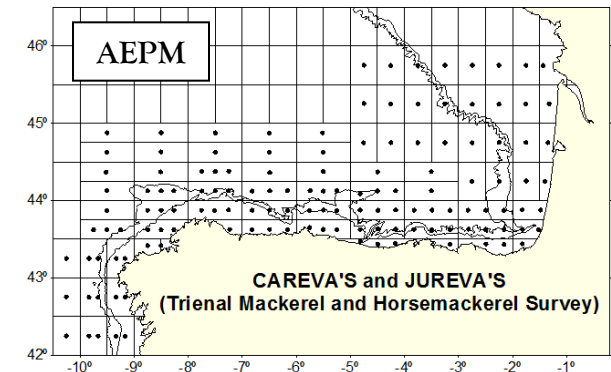
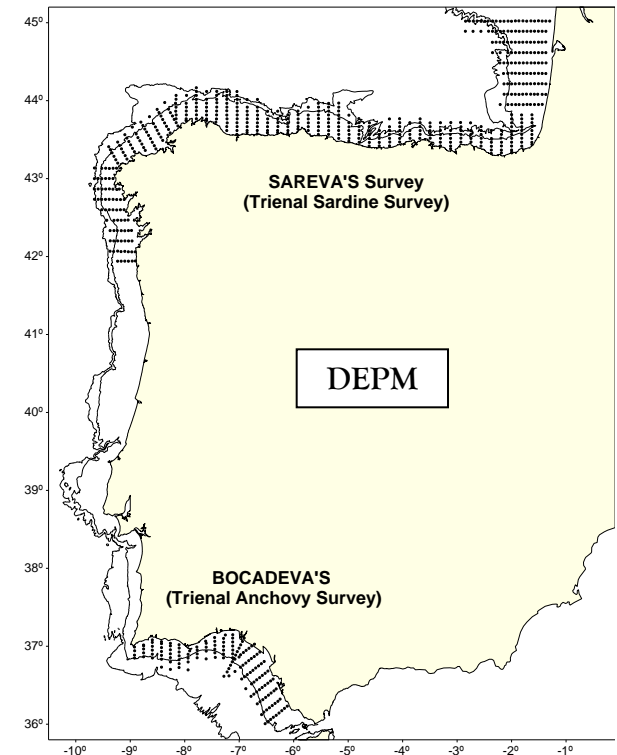
## Sources of information





# Egg Production Method Series

Overall information	SAREVA	BOCADEVA	CAREVA-JUREVA
Survey area	NW and N Spain & Bay of Biscay (42°-45°N, 1°-10°W)	Gulf of Cadiz (36°-37.2°N, -6°-9°W)	NW and N Spain & Bay of Biscay (42°-45°N, 1°-10°W)
Target species	<i>Sardina pilchardus</i>	<i>Engraulis encrasicolus</i>	<i>Scomber scombrus</i> <i>Trachurus trachurus</i>
Transects (N and Sampling grid)	63	21 (8 x 3)	32
Frequency	Triennial survey	Triennial survey	Triennial survey
Period	March-April	June-July-August	March-April
Historical serie	1988 – 2014	2005 - 2014	1992 - 2013
Main Sampler	PairoVET	PairoVET	Bongo-40
Number stations	500-530	120-150	136
Net size	150 µm	150 µm	250 µm
Sampling max. depth	100m	100m	200m
Other Sampler	CUFES	CUFES	—
Number stations	480-520	100-150	
Net size	335 µm	335 µm	
Sampling depth	5 m	5 m	
Flow	600 l/min	600 l/min	
Environmental data	Temperature, Salinity and fluorescence	Temperature, Salinity and others	Temperature, Salinity and fluorescence
Hydrographic sensor	CTD, termosalinometer	CTD, termosalinometer	CTD, termosalinometer

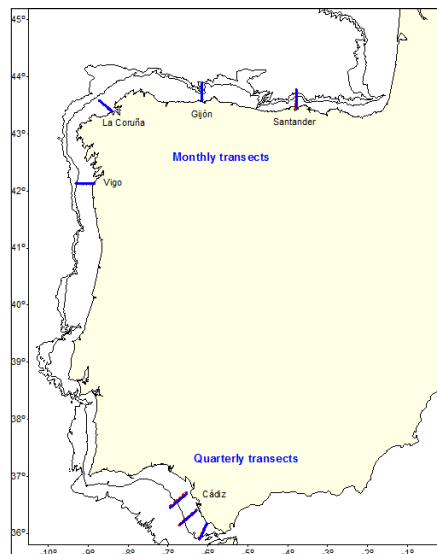




# Monitoring surveys (observational series)

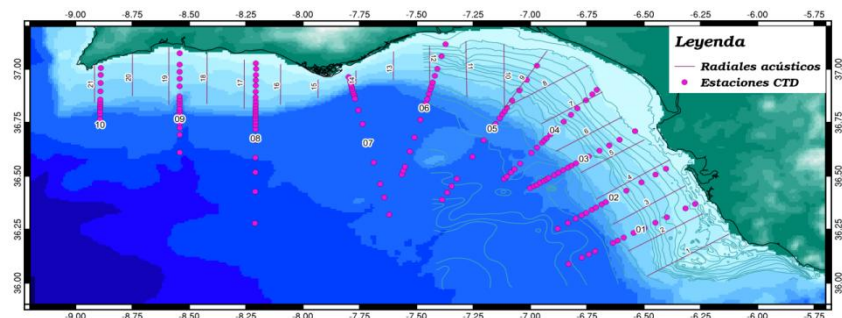
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Overall information	RADIALES	STOCA
Survey area	Cantabrian Sea	Gulf of Cadiz
Transects	4	3
Number stations	16	16
Frecuency	Monthly	Quarterly
Period	1988- At present	July 2009-March 2015
Main Sampler	Bongo-40	Bongo-40
Net size	250 µm	200 µm
Sampling max. Depth	200m	200m
Other Sampler		Neuston sampler
Net size	—	200-250µm
Environmental data	Temp. and Salinity	Temp., salinity and others
Hydrographic sensor	CTD	CTD-LADCP



## Acoustic Series

Overall information	ECOCADIZ
Survey area	Gulf of Cadiz (36°-37.2°N, 6°-9°W)
Target species	<i>Engraulis encrasicolus</i>
Transects	21
Period	July-August
Historical serie	2004, 2006, 2007, 2009, 2010, 2013, 2014
Sampler	CUFES
Number stations	100-150
Net size	335
Sampling depth	5 m
Unit sampling	3 nm
Flow	600 l/m
Environmental data	Temperature and salinity
Hydrographic sensor	CTD, termosalinometer



## Overall information

### Minimum (common) sampling information

Survey  
Area  
Vessel  
Sampler  
Net size  
Transect  
Station  
Year  
Month  
Day  
Date  
Time start  
Time end  
Latitud start  
Longitud start  
Latitud end  
Longitud end  
Bottom  
Depth  
Volume of filtered water  
Efarea  
Temperature  
Salinity  
Wind Speed  
Wind Direction  
State of the Sea  
Dist. Coast  
Dist. 200m isobath

Format support: EXCEL

# PairoVET

Anchovy and  
Sardine stages egg  
I  
II  
III  
IV  
V  
VI  
VII  
VIII  
IX  
X  
XI  
Dis  
Ancheggsm<sup>2</sup>  
Sareggsm<sup>2</sup>  
Othereggsm<sup>2</sup>

## Bongo-40/Bongo-90/Neuston

- Number of eggs and larval classified into the minimum taxonomic level
- Biovolume zooplankton

## Bongo 40 (AEPM)

Mackerel eggs: I, II, III, IV, V, Dis  
Horse mackerel eggs: I,II,III,IV, Dis  
Ancheggs<sup>m2</sup>  
Sareggs<sup>m2</sup>  
Othereggs<sup>m2</sup>  
Larval

# CUFES

Ancheggs	No Embryo (NE): I, II and III
Sareggs	Early Embryo (EE): IV, V and VI
	Late Embryo (LE): VII to XI
Ancheggs <sup>m3</sup>	
Sareggs <sup>m3</sup>	
Othereggs <sup>m3</sup>	

- Temperature, salinity and other parameters (O<sub>2</sub>, Fluorescence,..) profiles
- Currents in some cases

[illegible]

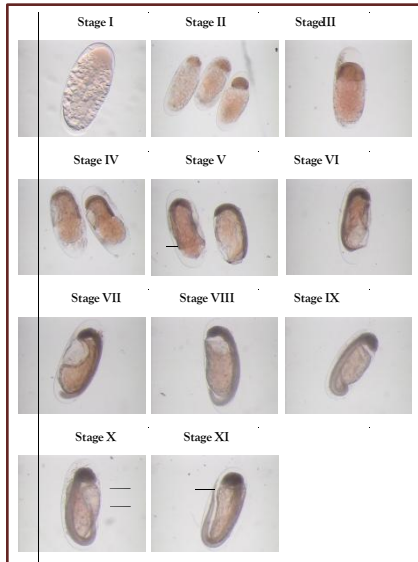




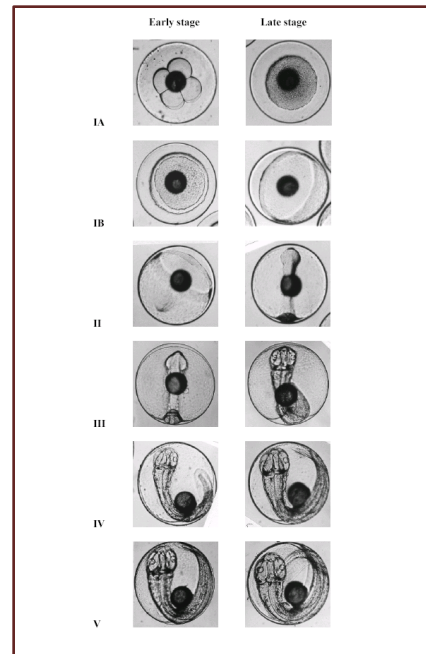
# Stageing eggs

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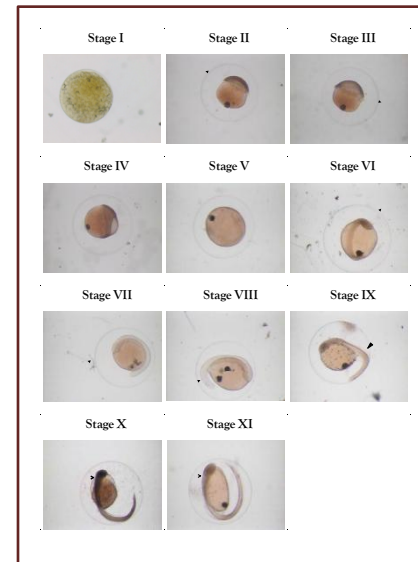
## *Engraulis encrasicolus* (Moser & Ahlstrom, 1985)



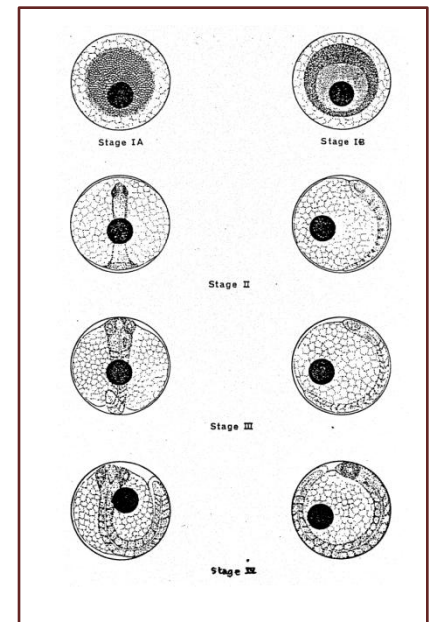
## *Scomber scombrus* (Lockwood, S.J et al, 1977)



## *Sardine pilchardus* (Ahlstrom, 1943, Gamulin and Hure, 1955)



## *Trachurus trachurus* (Pipe, R.K. and Walker, P. 1987)





## Research vessels



*Cornide de Saavedra* (IEO) 67 m



*Miguel Oliver* (SGPM) 70 m



*Ramón Margalef*  
*Angeles Alvariño* (IEO) 46 m



*Vizconde de Eza* (SGPM) 53 m



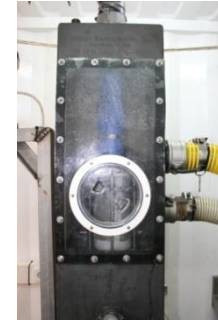
Neuston sampler

Bongo-90 (horizontal tows)

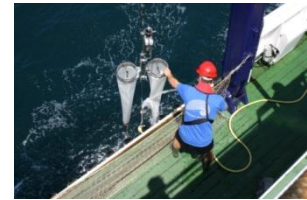


## Scientific equipment and sampling gears

CUFES



PairoVET  
(vertical tows)



Bongo-40  
(double oblique tows)



CTD SEB25



Oceanographic rosette  
CTD-LADCP-Niskin bottles



MiniCTD

## WKIELD terms of reference

The Workshop on the ICES Egg and Larval Database (WKIELD), chaired by Cindy van Damme, the Netherlands, and Carlos Pinto, Denmark, will meet in Copenhagen, Denmark, 27-29 April 2015 to:

- Review and finalise the input and output format of the ICES egg and larval database;
- Instruct ichthyoplankton survey participants in the format of the database and prepare their datasets for uploading to the ICES egg and larval database;
- Prepare a list of output products and reports needed from the ICES egg and larval database.

WGALES will report by 22<sup>nd</sup> of May to the attention of WGALES, WGMEGS, WGEGBS2, WGIPS, IBTSWG and WGACEGG.

### Supporting Information

Priority	<p>The ICES egg and larval database will ensure and standardise ichthyoplankton survey data. Through the standardization and review process before uploading the data to the database the quality of the ichthyoplankton data for the assessment groups is ensured.</p> <p>Scientists involved or in charge of various ichthyoplankton surveys are willing to store the datasets of their survey into the ICES egg and larval database. This workshop will allow scientists to reformat and upload their data into the ICES database.</p> <p>The workshop will result in an agreed standard format for reports and products from the ICES egg and larval database for use in assessments and other scientific needs.</p>
Scientific justification	<p>Term of Reference a)</p> <p>Several ICES coordinated and non-ICES coordinated ichthyoplankton surveys are carried out in the Northeast Atlantic. The ICES egg and larval database should give the possibility of all ichthyoplankton survey dataset carried out in the ICES areas to be uploaded to the ICES egg and larval database.</p> <p>Term of Reference b)</p> <p>Scientists involved or in charge of various ichthyoplankton surveys are willing to store the datasets of their survey into the ICES egg and larval database. Not all of these scientists are familiar with the format of the database. This workshop will allow scientists to bring their datasets and reformat these to be able to upload the data into the ICES database.</p> <p>Term of Reference c)</p> <p>The workshop will prepare an overview of output products needed for assessments and/or scientific advice from the ichthyoplankton surveys datasets.</p>
Resource requirements	<p>The research programmes which provide the main input to this group are already underway, and resources are already committed. The additional resource required to undertake additional activities in the framework of this group is negligible.</p>
Participants	<p>10-20 scientists have indicated interest to participate in this workshop. The workshop will be attended by members of ICES groups, WGMEGS, WGEGBS2, WGIPS, IBTSWG, WGACEGG and guests carrying out ichthyoplankton surveys in the (non-)ICES areas.</p>
Secretariat facilities	<p>Meeting room facilities at the ICES secretariat and support with finalising of the report.</p>
Financial	<p>No financial implications.</p>
Linkages to advisory committees	<p>There are linkages with the advisory committees through the individual ichthyoplankton surveys groups. Through the review and standardization of the ichthyoplankton surveys data the quality of the data for the assessments is ensured. Assessment groups using ichthyoplankton survey data have indicated they want to use the data from the ICES egg and larval database directly for use in their assessments.</p>
Linkages to other committees or groups	<p>SCICOM and there is a very close working relationship with all the groups of ichthyoplankton surveys, WGMEGS, WGEGBS2, WGIPS, IBTSWG, WGACEGG and their assessment groups, WGIDE, HAWG, WGHANSA.</p>
Linkages to other organizations	<p>No formal linkages.</p>

In relation to upload and store the datasets of the surveys into the ICES egg and larval database, “data accessibility” is a very sensitive topic, even for a research institute that gets part of its funding from public sources such as the Data Collection Framework (DCF) and others like us, the IEO.

For this reason, the IEO needs to evaluate

- the format of the data to be included in the database, or that will be available from the database, primary data, aggregated data?
- the access policy of the database, open to all? Can data providers have a saying on who gets access?
- or if aspects such as a time could be considered or whether other considerations could be used to “protect” the proprietary rights of data providers?”





Thank you very much

